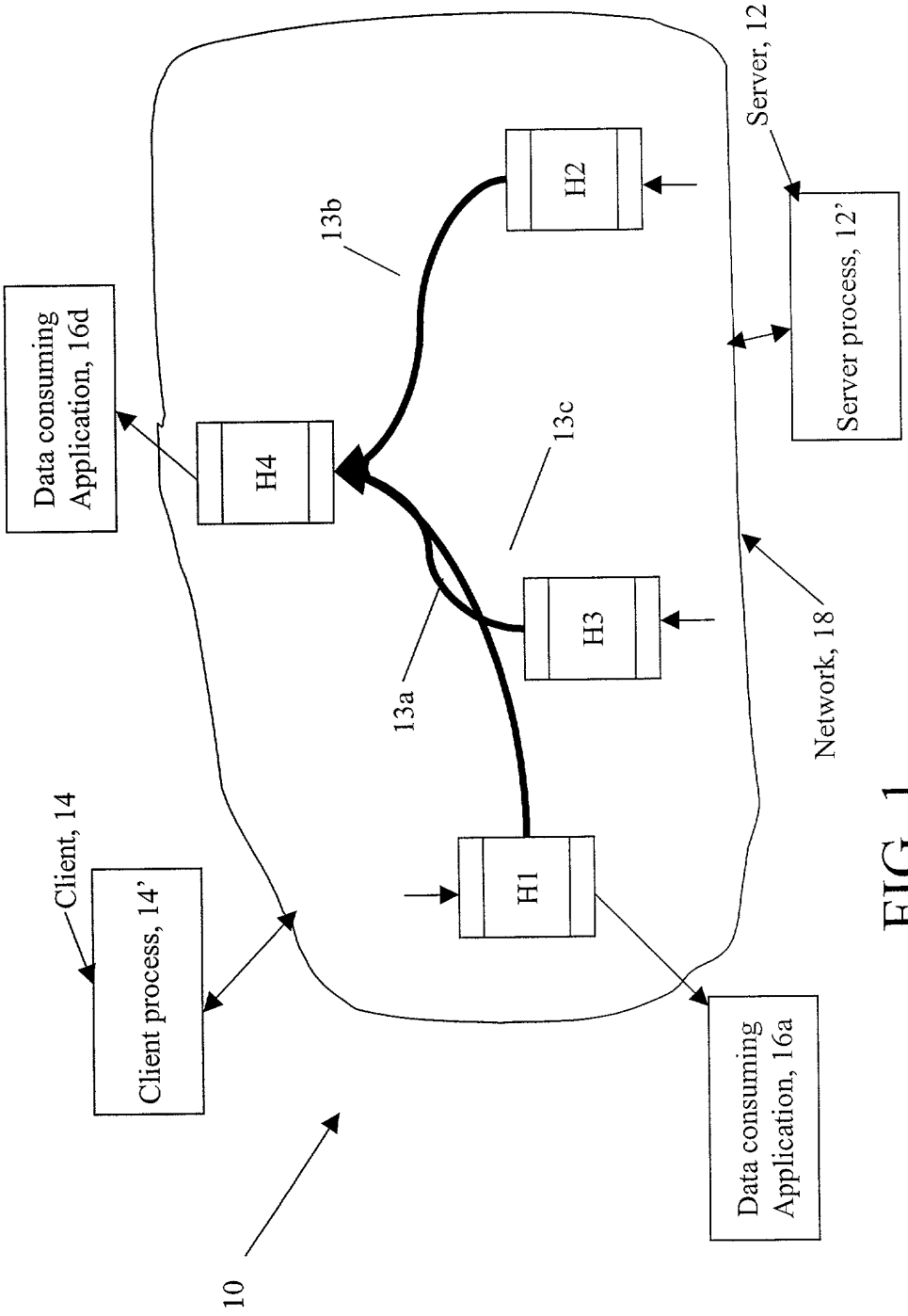

Server, 12
Server process, 12'
Data consuming Application, 16d
13b
H2
H4
13c
H3
13a
Network, 18
Client, 14
Client process, 14'
H1
Data consuming Application, 16a
10

FIG. 1

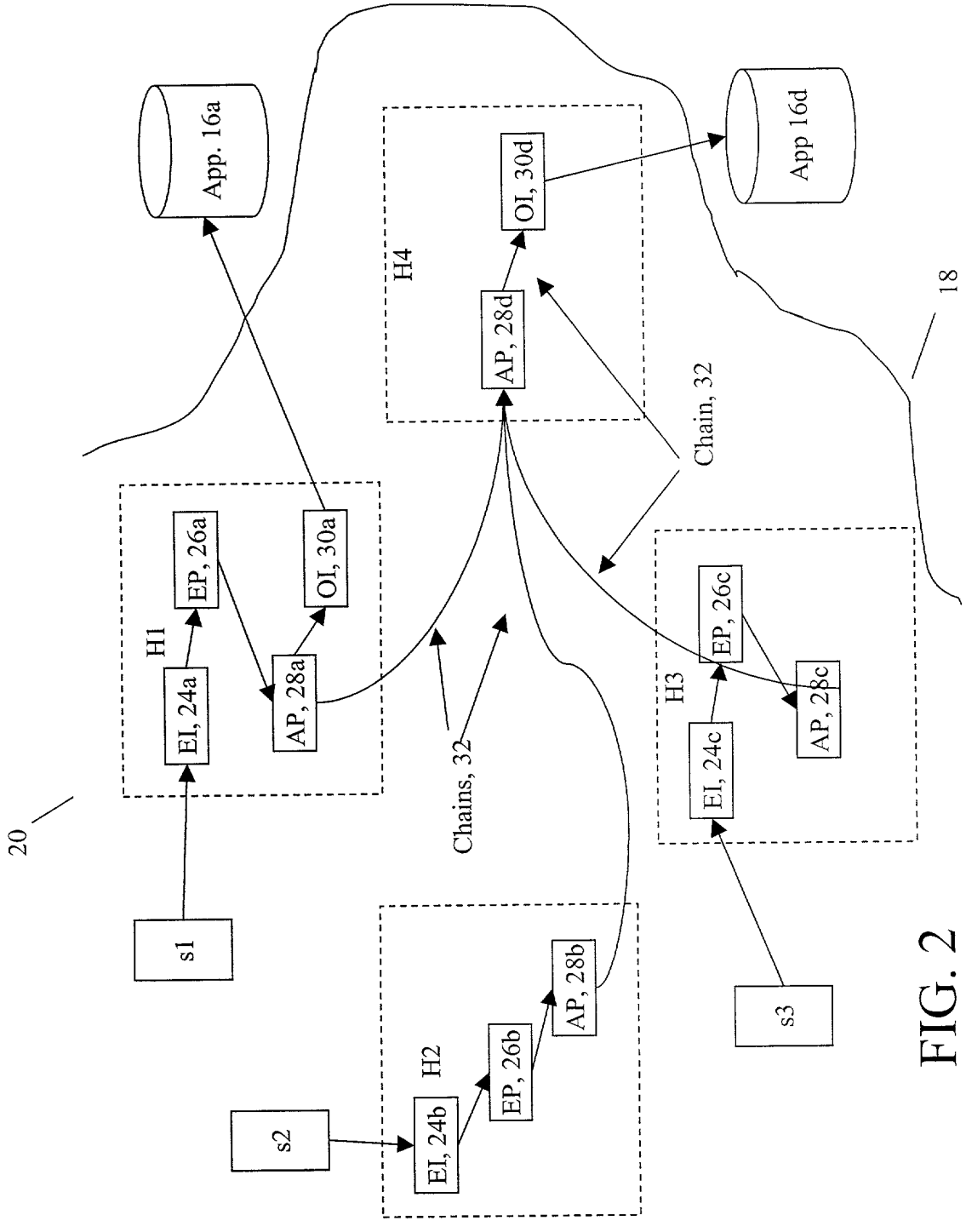

20
s1
s2
s3
H1
EI, 24a
EP, 26a
AP, 28a
OI, 30a
H2
EI, 24b
EP, 26b
AP, 28b
H3
EI, 24c
EP, 26c
AP, 28c
H4
AP, 28d
OI, 30d
App. 16a
App 16d
Chains, 32
Chain, 32
18

FIG. 2

FIG. 3

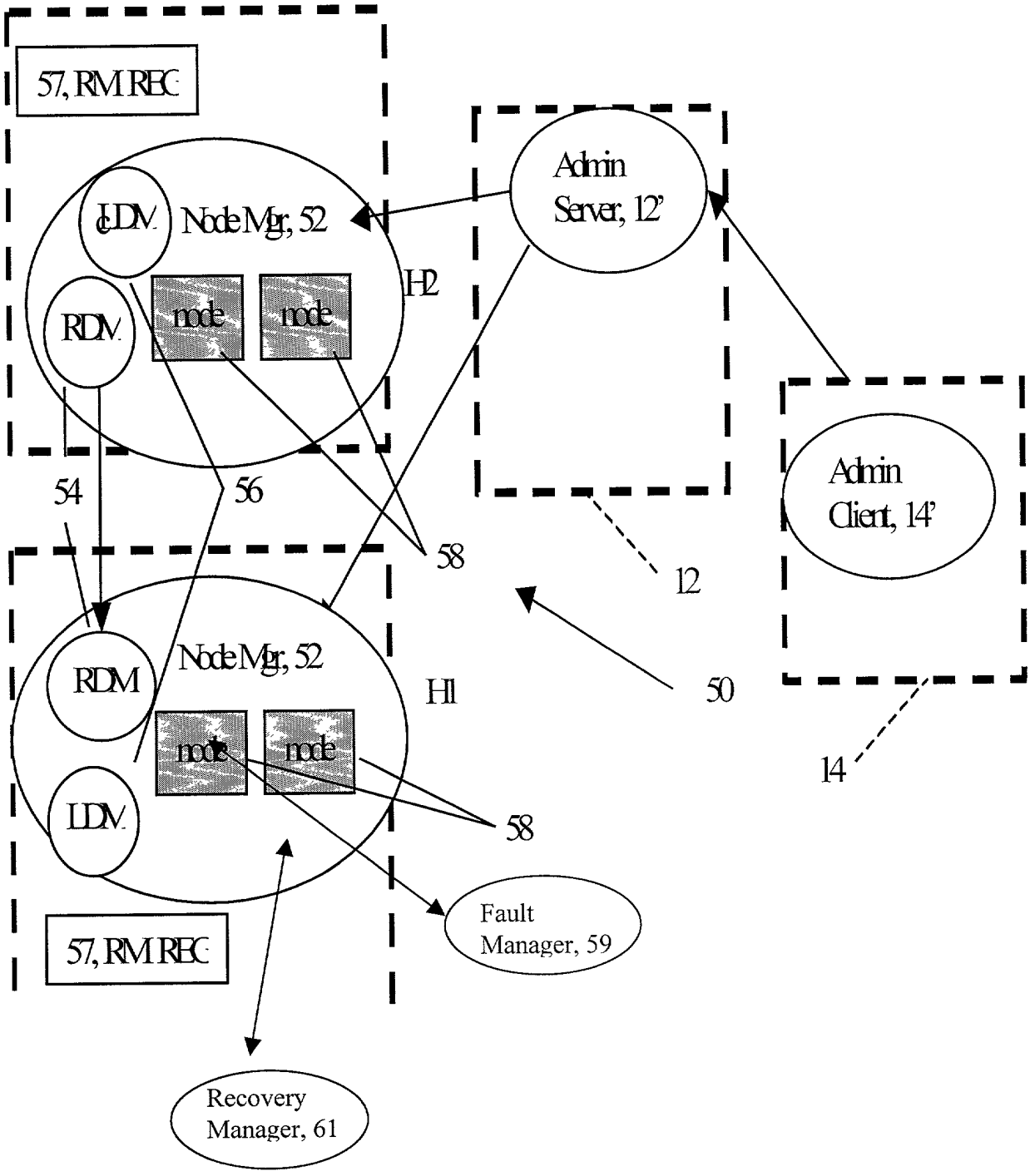
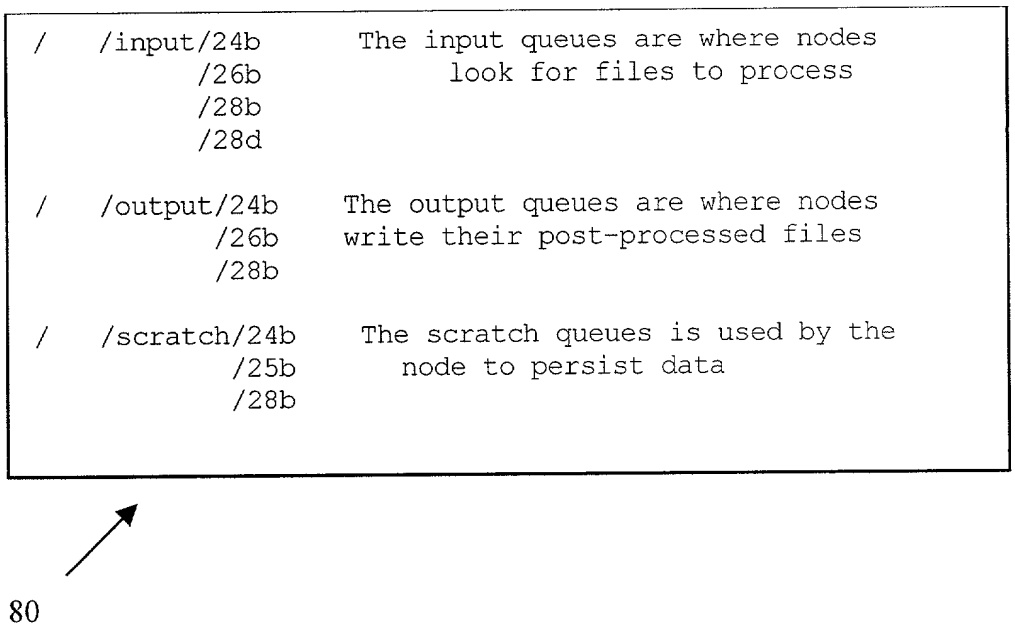

57, RM REC
LDM
Node Mgr, 52
RDM
node
node
H2
Admin Server, 12'
Admin Client, 14'
54
56
58
12
RDM
Node Mgr, 52
H1
50
node
node
LDM
58
14
Fault Manager, 59
57, RM REC
Recovery Manager, 61

FIG. 4


/ /input/24b
/26b
/28b
/28d
The input queues are where nodes look for files to process
/ /output/24b
/26b
/28b
The output queues are where nodes write their post-processed files
/ /scratch/24b
/25b
/28b
The scratch queues is used by the node to persist data
80

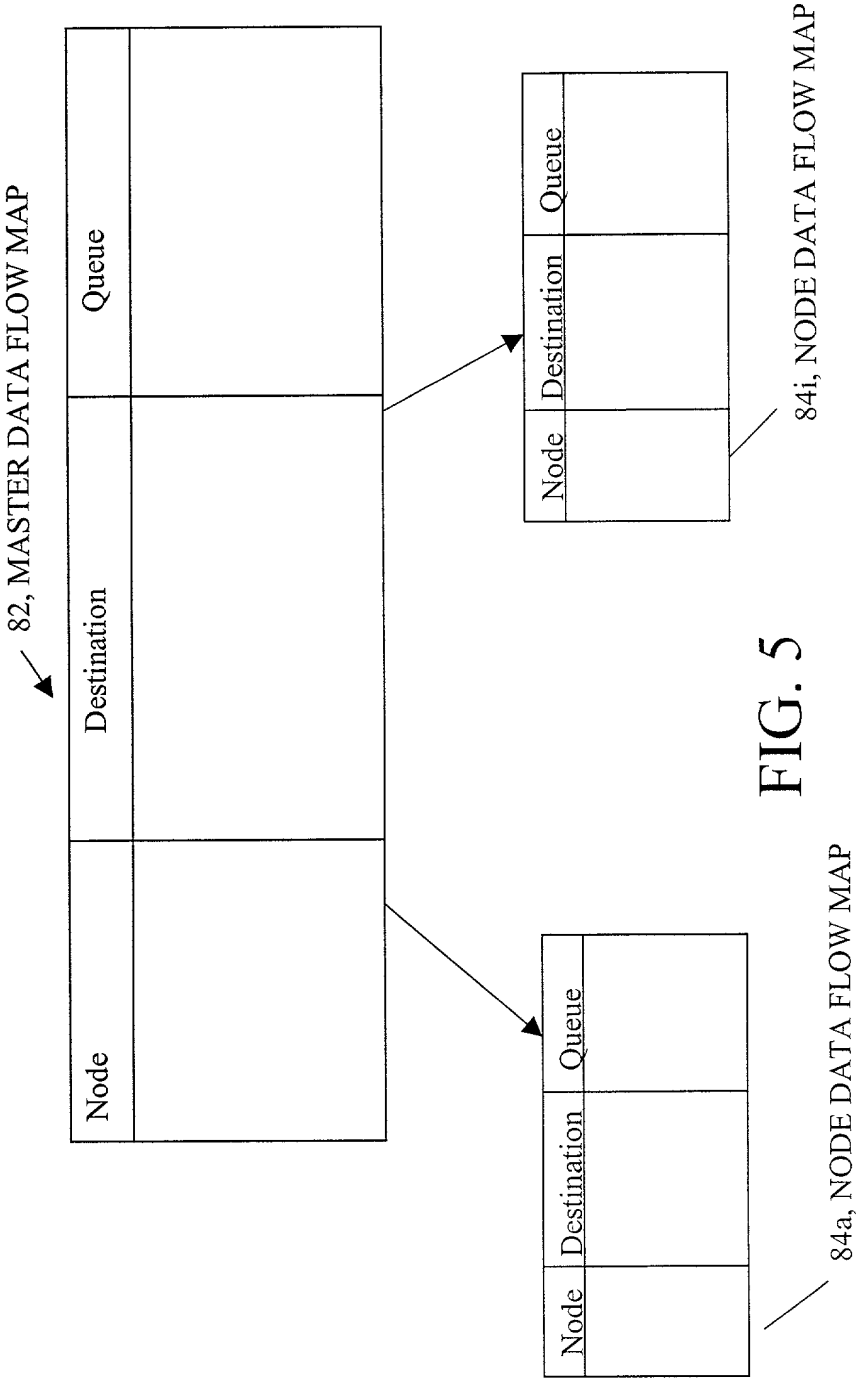

82, MASTER DATA FLOW MAP
Node
Destination
Queue
84a, NODE DATA FLOW MAP
Node
Destination
Queue
84i, NODE DATA FLOW MAP

FIG. 5

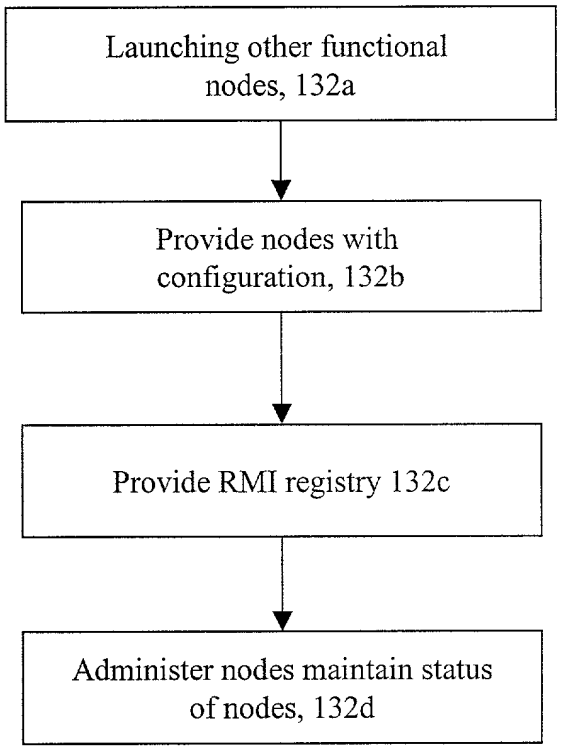
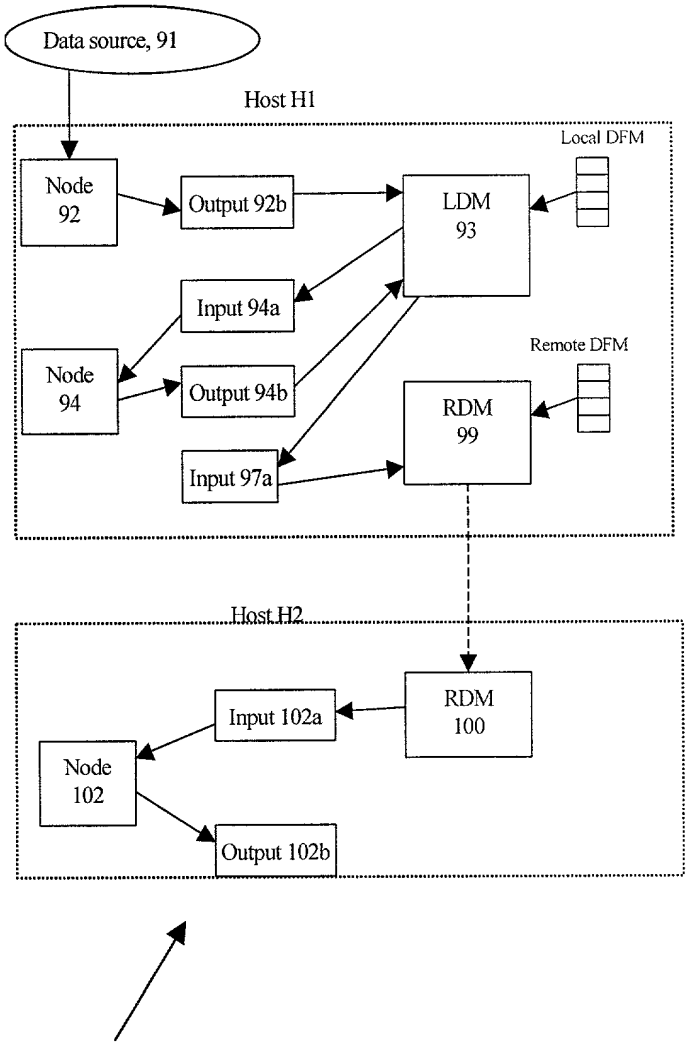

Launching other functional nodes, 132a
Provide nodes with configuration, 132b
Provide RMI registry 132c
Administer nodes maintain status of nodes, 132d

FIG. 6

FIG. 7


Data source, 91
Host H1
Local DFM
Node 92
Output 92b
LDM 93
Input 94a
Node 94
Output 94b
Remote DFM
RDM 99
Input 97a
Host H2
RDM 100
Input 102a
Node 102
Output 102b
90

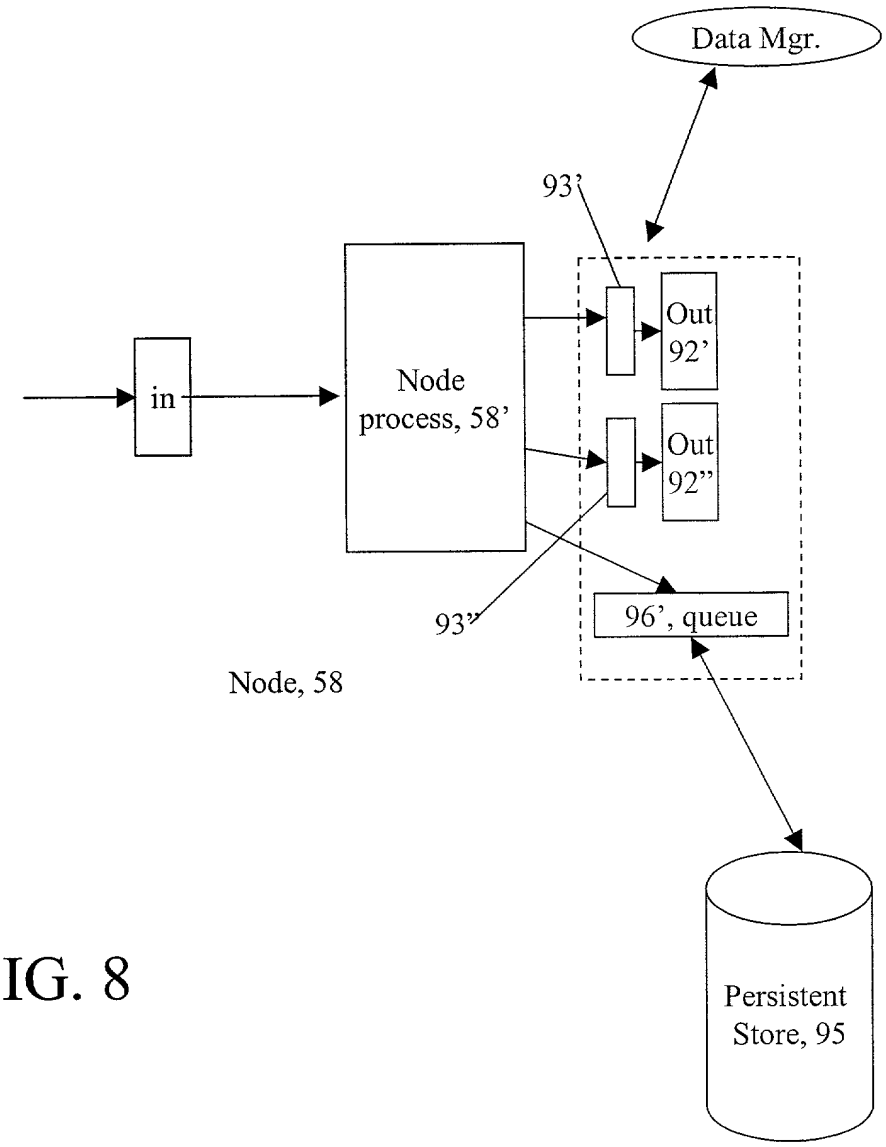

Data Mgr.
93'
in
Node process, 58'
Out 92'
Out 92"
93"
96', queue
Node, 58
Persistent Store, 95

FIG. 8

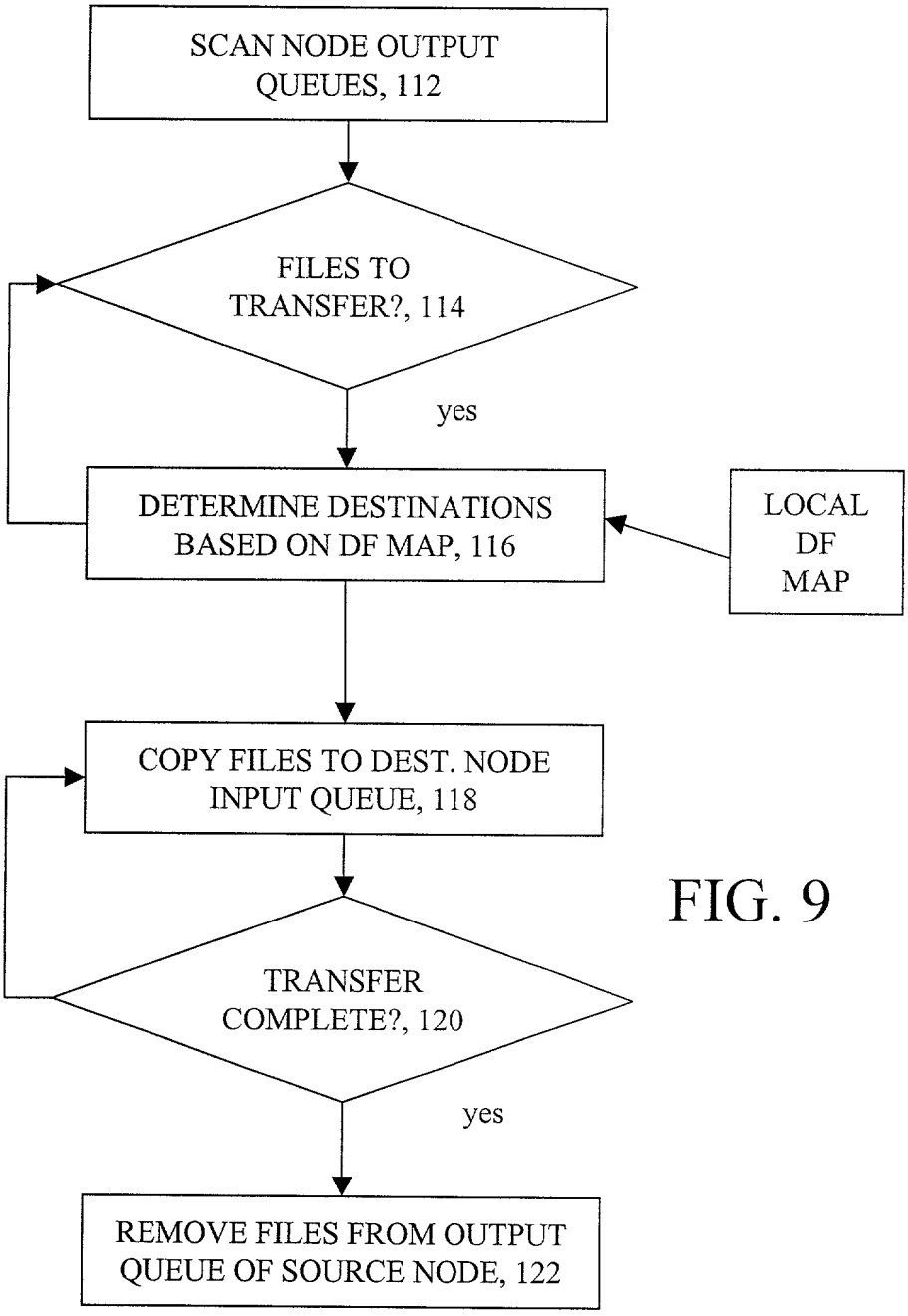

SCAN NODE OUTPUT QUEUES, 112
FILES TO TRANSFER?, 114
yes
DETERMINE DESTINATIONS BASED ON DF MAP, 116
LOCAL DF MAP
COPY FILES TO DEST. NODE INPUT QUEUE, 118
TRANSFER COMPLETE?, 120
yes
REMOVE FILES FROM OUTPUT QUEUE OF SOURCE NODE, 122

FIG. 9

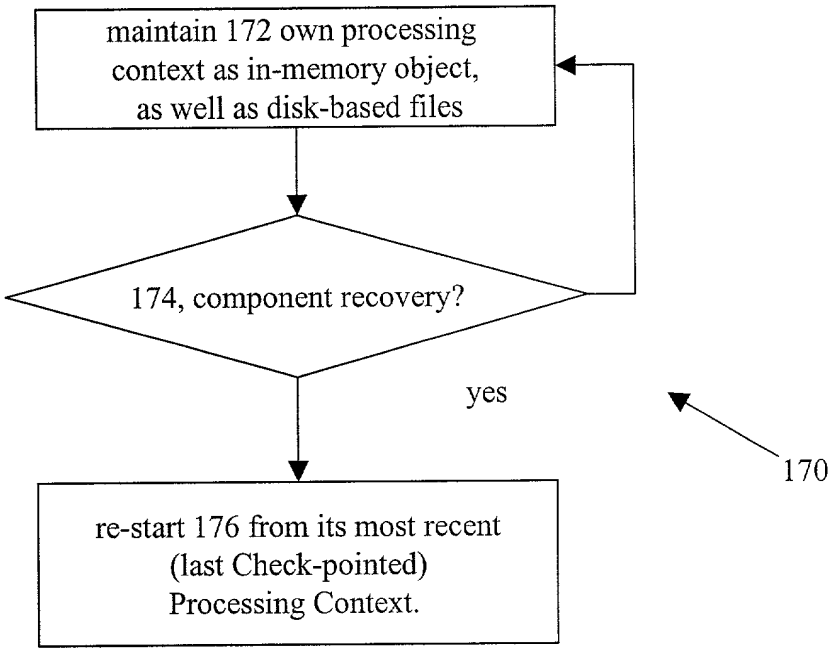


FIG. 10

Express Mail Label No. EV 339 920 705 US

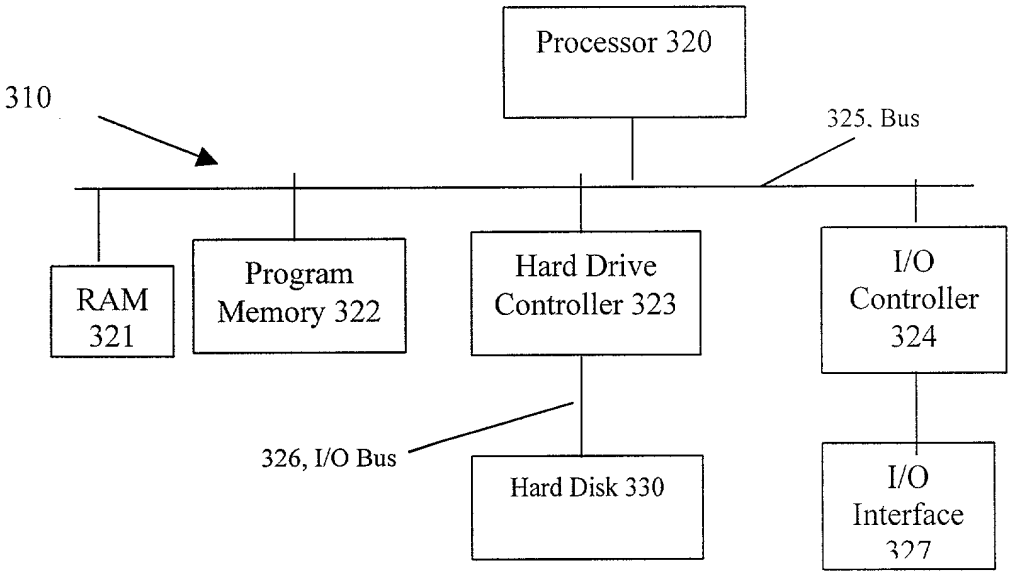

Processor 320
310
325, Bus
RAM 321
Program Memory 322
Hard Drive Controller 323
I/O Controller 324
326, I/O Bus
Hard Disk 330
I/O Interface 327

FIG. 11